



WIRELESS CONSULTANTS

Alternative Site Analysis

When searching for a site for the AT&T “Lyons Valley” search ring, our goal was to cover the objective utilizing a single installation if possible. Since wireless coverage works on a line-of-sight basis, the higher a site location is, typically the better job it will do with coverage. As the site development team investigated this area, we observed the mountain located to the north of the Lyons Valley Trading Post / town center area. After investigation, we determined that there was a viable project location on this mountainside, with the ability to cover the objective, and also having sufficient electrical power available.

Once we determined that the site was available, that there were no significant impediments to construction, and that the location would serve our objective, we selected this candidate for our site. Our search for a higher-preference land use category revealed no higher-preference land uses available in the surrounding area. Utilizing this communications site, with its superior topographical position, will allow the AT&T antennas to be located approximately 200 feet above the level of the roadway and valley areas below. This would allow the coverage objective to be achieved with the use of a single facility. A site located at or near the level of the valley floor would cover only a small percentage of the footprint represented on the attached RF coverage maps, and would require approximately 3 total sites to achieve the same coverage footprint.

Preference Categories

Section 6986 of the Telecommunications Ordinance (Preferred Sites) identifies the preference categories assigned to proposed zones and locations. The project site is zoned A-72, which is not a preferred zone for telecommunications facilities. The project location is on a site that is mostly undeveloped, surrounded by rock outcroppings and foliage, which functions to help camouflage the proposed faux tree and bush facilities. Although this design is defined as “high visibility” according to the County’s Wireless Ordinance because it exceeds the height and is a tree design, it is the most appropriate design for the subject site. The proposed faux tree and bush designs will appear as natural landscape elements that would blend in with the surrounding environment as accepted elements in the public’s view.

When searching for a site for this AT&T search ring, the original goal was to address the coverage objective utilizing the fewest number of installations possible. The site search first attempted to identify preferred zones and land uses, as required by the Municipal Code.

Below is a list categories that the site development team explored prior to arriving at the proposed location.

- *Preferred Zones: Industrial and Commercial*
Within and around the project search ring there are no industrial or commercial zones. Due to the topographical variations within the area, this particular search ring was extremely narrow. The surrounding area is solidly agricultural/residential zoning and land use character of the project area (entirely A72 zoning). There are no industrial or commercial sites within the search ring area that would function from an RF perspective. The nearest commercially zoned parcel is located at 17510 Lyons Creek Road, which is less than ¼ mile from the subject property. However, this parcel is over 100' lower in elevation and would not provide the needed propagation signal.
- *Preferred Locations:*
 - *Public Right of Way / Utility Poles*
Public right-of-way solutions were sometimes relied upon with earlier generation wireless facilities when the requirements for data capacities were less and quick voice only coverage solutions were acceptable. The current generation AT&T broadband installation requires a minimum of 240-square-feet of base station area and the capacity to carry 12 panel antennas. No public right-of-way location was identified that could accommodate the AT&T facility required to provide adequate coverage and service level to the target area. Again, the significant topographical constraints of the surrounding area make utilities poles obsolete.
 - *Water Tanks*
Water tank sites are preferred solutions for wireless sites since they represent a non-residential land use, frequently located within residential areas and located on high ground. However, we were unable to identify any water tank facilities in the search ring. There is an existing 13' water tank on the property that is utilized by the owner; however, it does not provide the needed height.
 - *Non-Residential Land Uses*
Opportunities for any non-residential land uses were examined. Our search for non-residential land uses included commercial sites, parks, fire stations, schools, churches, community centers and open space areas. However, we were unable to identify any non-residential land uses in the search area.
 - *Co-location Opportunities*
Unfortunately, there we no collocation opportunities in the search ring.

- *Agricultural/Residential Parcels*

The subject site is on an agriculturally zoned (A72) parcel. Before settling on the proposed site, we had explored one other property in the same zone:

- POLAK VICTOR M & PATRICIA W
16467 LYONS VALLEY RD
JAMUL, CA 91935
APN: 599-101-04-00

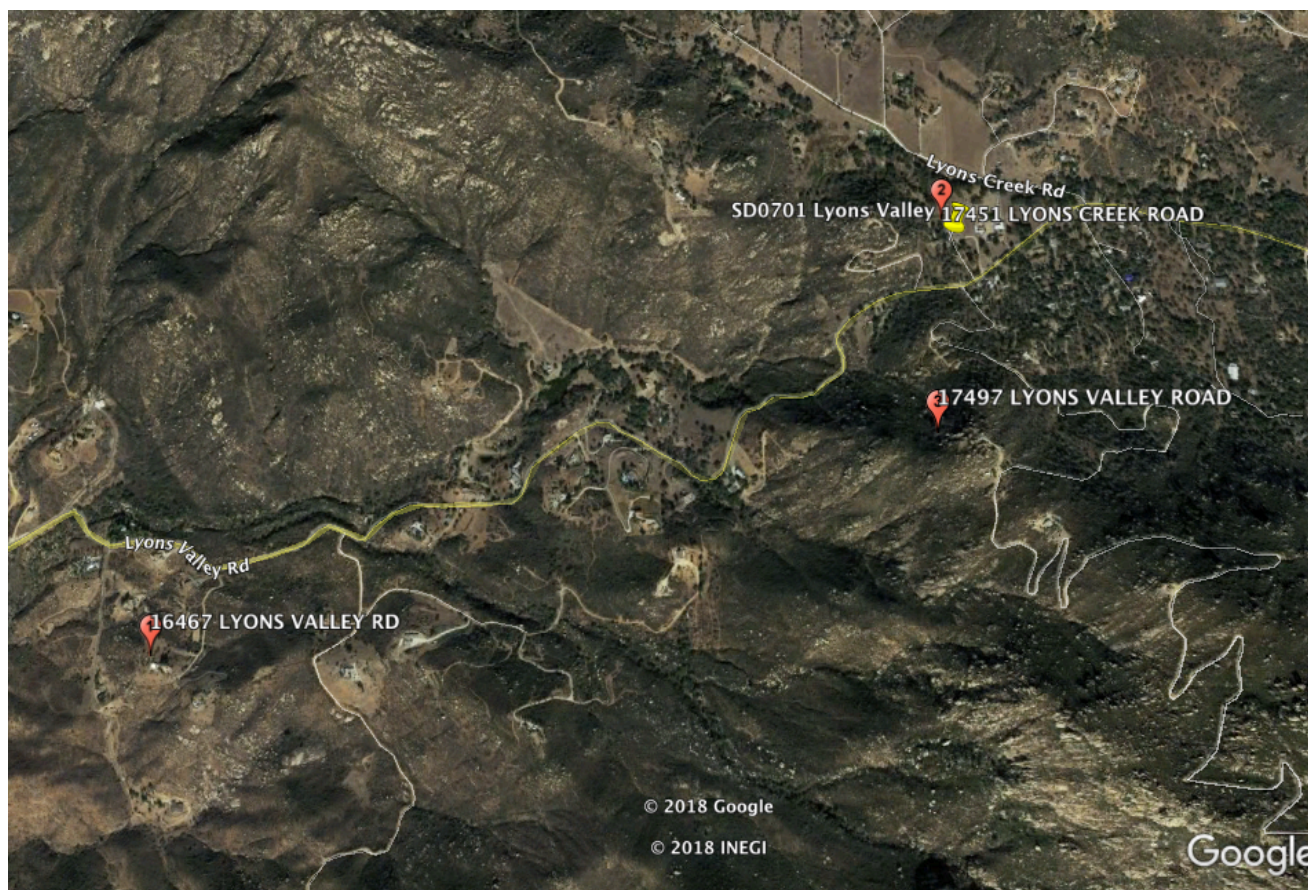
However, this property is landlocked and does not have legal access to a County-maintained road.

- ABBOTT TIMOTHY & VANESSA
17451 LYONS CREEK ROAD
JAMUL, CA 91935
APN: 599-110-51

This property is approximately 120' lower in elevation and would not provide the needed height. Furthermore, the sector directed southwest would be completely blocked by the hill (which is the subject property).

- MCMURTRY WILLIAM & CANDICE
17497 LYONS VALLEY ROAD
JAMUL, CA 91935
APN: 599-110-12

This candidate was explored in 2011, and the property owner decided not to move forward with an AT&T lease after 9 months of AT&T pursuing this candidate. AT&T eventually lost funding for this project, so it was cancelled. When the search ring was re-issued in 2013, we did not explore this candidate again due to the history.



Although the subject facility is located in a non-preferred zone (A72), it is designed to be in harmony with the aesthetics of the neighborhood. Furthermore, the antenna location within foliage as a screening mechanism helps the AT&T facility blend with the surrounding community character and appear as a natural element for views up the hill.

Public Benefit

The serious lack of coverage in and around the project area has significant public safety considerations. The majority of 911 calls are now placed by wireless telephone, and many of the emergency responders now rely upon the wireless networks to a large degree for their communications. The proposed wireless facility would be E-911 compliant, meaning that emergency calls placed from the wireless phones of other carriers would connect through the proposed AT&T site. In such hilly areas, regular radio communications may not be reliable, but the cellular networks provide secure communications for areas having network coverage. Also, the wireless systems have the ability to locate lost, injured or stranded persons with the GPS aspect of the cellular networks. These rural communities of the County are vulnerable to isolation in the event of wildfires, earthquakes or other public emergencies if regular landline communications become severed. The installation of the proposed AT&T facility would greatly

enhance personal, business and emergency communications for this rural community San Diego County.